The Healthcare Analytics, Technology Transfer, Research and Evaluation Group
School of Nursing
Postdoctoral Research Fellow (University Postdoctoral Fellow 1)

PLEASE FOLLOW THE SPECIFIC APPLICATION FILING INSTRUCTIONS AT THE BOTTOM OF THIS PAGE!

Open To: The Public

Location: University of Connecticut. The positions are currently based in Farmington, CT, but will be relocated to Hartford in 2016.

Hours: 40 hrs / wk

Salary: Salary will be commensurate on successful candidates' background and experience.

Closing Date: May 11, 2016

Position Overview: The Healthcare Analytics, Technology Transfer, Research and Evaluation Group (http://chatter.uconn.edu/) within the School of Nursing at University of Connecticut (http://nursing.uconn.edu/) is seeking to hire **three (3)- four (4) Postdoctoral Research Fellows**. The successful candidates will conduct research within the fields of health services, public policy, biomedical informatics, machine learning, geo-spatial, and biostatistics using large amounts of clinical data extracted from electronic health records, claims data, and other related structured and unstructured social services data. These selected postdoc research fellows will participate in identifying and designing innovative methods to conduct research using comprehensive clinical knowledge bases and advanced machine learning tools by applying scientific principles to real-world health and healthcare problems. Our group values an ethical and collaborative environment that supports entrepreneurship.

The proposed research, evaluation, and program development studies provide an excellent opportunity for the Postdoctoral Research Fellows to work within a multidisciplinary research team to explore and advance areas of inter-disciplinary health services research supported by health information technologies and tools. The Research Fellow will be encouraged to teach, prepare and submit research proposals as appropriate, and to lead publications. Our goal is to research, evaluate, design, develop, and apply computer technologies and scientific discovery methods with an eye to develop strategies that increase our translational abilities and support delivery of quality healthcare.

These are full-time, grant-funded end-dated positions that are subject to annual renewal depending on available funding and job performance

General Knowledge: PhD degree in one of the following: health services research, biomedical informatics, clinical informatics, machine learning, statistics, systems engineering, computer science, information science, computational linguistics, public health, data mining, policy research, math sciences, engineering, environmental science, automation, business economics, health economics, finance, geo-spatial science, or a closely related field; or an MD/PharmD/Nursing with demonstrated strength in Biomedical Informatics research.

General Experience: Experience in application of translational or inter-disciplinary or biomedical informatics research

General Skills and Ability:

- Ability to plan and carry out research and evaluation experiments and projects.
- Strong written and oral communication skills as documented by presentation at conferences, written reports (technical funder reports and or two scientific publications in peer-reviewed journals)
- Proficiency in at least one of the following computer programming languages, SQL, Python, Java, C#, C++, PERL, PHP, javascript.
- Proficiency in at least one of the following framework or statistical analyses programming languages; R, SAS, SPSS, ESRI, QGIS, Hadoop, etc.

Special Experience by Category:

Research, Evaluation, Teaching Skills

- Familiar with machine learning and statistical informatics methods
- Skills in advanced longitudinal statistical methods

- Ability to recognize data patterns, quantify potential issues and identify solutions
- Experience teaching undergraduate and graduate courses
- Understanding and practical knowledge of Health Care Data Standards and Ontologies
- Strong understanding of database structures, theories, principles and practices
- Knowledge of big data concepts and technologies
- Understanding of data warehouses, logical mapping, data modeling and business requirements to create client deliverables (i.e. reports, data summarizations, documentation, design documents, other)
- Understanding of Medical Data Warehousing Concepts
- Knowledge of HIPAA and other relevant privacy regulations

Terminologies and Ontologies

- Knowledge of healthcare terminology, plan/benefit design, fundamental operational principles and administrative claims data including standard coding schemes such as HL7, UMLS, ICD-9/10, HCPCS, SNOWMED, NDPDP, RxNorm.

Standards

- Working Knowledge of FHIR, Direct Messaging, CCDs, CCDAs

Work Experience

- Experience in working with Medicaid/Medicare/Commercial health plan data
- Expertise in health insurance research or using large electronic health record data

Data Architecture/Data Repository/Business Analysis

- Knowledge of data warehousing and data mining concepts including ETL, datamart design, fact tables, dimension tables, data views within data marts/data warehouses, olap, rolap, and data models such as star schemas and snowflake schemas.
- Experience in developing and managing healthcare research grade datasets desired
- Competency in programming concepts such as Visual Basic, Business Objects, .Net, MDX, C++, or COBOL
- Experience using a variety of data extraction tools (SQL, Business Objects, TOAD, SAS, other), transforming, normalizing and making data ready for analysis
- Experience and understanding of federated, distributed, virtual dataware house architecture
- Extensive familiarity with clinical data system and clinical data warehousing solutions including i2b2 or OMOP
- Proficient use of MS Office applications including Word, Excel, Access, PowerPoint, Project and Visio
- Hands on expertise with visualization tools like Tableau, Qlik, Domo, SAS, or similar tools for creating interactive dashboards
- Analyze business and technical requirements for a variety of Healthcare Reporting deliverables (i.e. financial, eligibility, claims)
- Knowledge of work flow analysis

General

- Strong commitment to excellence in research.
- Must possess energy and drive to coordinate multiple projects simultaneously with an ability to prioritize tasks
- Ability to maintain confidentiality and professionally handle confidential information
- Ability to work with clinical staff and researchers to analyze data requirements and define study parameters

- Ability to use tact and diplomacy to maintain effective working relationships and excellent customer service
- Experience in identifying potential complex healthcare data questions and facilitate developing effective and efficient solutions to the inquiries
- Highly motivated with excellent interpersonal skills, analytical, critical thinking & problem solving skills
- Possesses a collaborative working style with an ability to take initiative to work both independently and in a team environment depending on project needs
- Record of reliable attendance, punctuality and proven successful performance

Application Instructions:

Interested Applicants may apply on-line using the UConn Jobs applicant system at http://jobs.uconn.edu. Please reference **Search #2016541.** Applicants should submit a cover letter identifying research and evaluation goals, a curriculum vitae and contact information for three (3) professional references. In addition, please submit at least one sample publication with clearly stated individual contributions. Evaluation of applications will begin immediately. Employment of the successful candidate will be contingent upon the successful completion of a pre-employment criminal background check. All employees are subject to adherence to the State Code of Ethics which may be found at http://www.ct.gov/ethics/site/default.asp.

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School of Nursing, Hartford

http://www.jobs.uconn.edu

Search #2016541

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The University of Connecticut is committed to building and supporting a multicultural and diverse community of students, faculty and staff. The diversity of students, faculty and staff continues to increase, as does the number of honors students, valedictorians and salutatorians who consistently make UConn their top choice. More than 100 research centers and institutes serve the University's teaching, research, diversity, and outreach missions, leading to UConn's ranking as one of the nation's top research universities. UConn's faculty and staff are the critical link to fostering and expanding our vibrant, multicultural and diverse University community. As an Affirmative Action/Equal Employment Opportunity employer, UConn encourages applications from women, veterans, people with disabilities and members of traditionally underrepresented populations.